washingtonpost.com

Colleges' Hottest New Major: Terror

Campuses Altering Courses, Tapping Into Homeland Security Funds

By Susan Kinzie and Sari Horwitz Washington Post Staff Writers Saturday, April 30, 2005; A01

Cathy Lanier had to think like a terrorist and come up with a way to kill a few thousand people at a picnic in San Luis Rey. The virtual town in California, repeatedly cursed with smallpox epidemics, explosions and attacks on its nuclear power plant, is part of her new education: The commander of special operations for D.C. police is earning a master's degree in the fast-growing field of homeland security.

Schools across the country are catering to such students as Lanier by revamping curricula and research as they try to keep pace with the changes brought on by the 2001 terrorist attacks and take advantage of a large pool of homeland security money. At hundreds of schools, Sept. 11 is influencing how many topics are taught -- from medicine to firefighting to politics to computer networking.

The changes are driven by legislation and policy, interest from students and faculty, demands from employers, a sense of mission -- and money.

The federal government has pumped cash into this new fight, spending more than \$12 billion for homeland security research and development over the past four budget years. "Homeland security is probably going to be the government's biggest employer in the next decade," said Steven R. David, who directs the homeland security certificate program at Johns Hopkins University.

"This is all brand-new ground," Lanier, 37, said.

Just as it did during World War II and the Cold War, the government is turning to academia as a partner in defending the country and understanding the enemy. At universities, there are graduate-level classes full of police officers, intelligence analysts and public health experts dwelling on worst-case scenarios, picking apart the cultures of terrorist groups and planning defenses.

Researchers are creating models of explosives and studying germs. And such workers as flight attendants, nurses and lab technicians, whose jobs have been transformed by a variety of threats, are getting hands-on training.

"It's growing by leaps and bounds," said Stanley Supinski, chairman of the Homeland Security/Defense Education Consortium, which was established by two military commands within the Department of Defense, along with two universities in Colorado and the Naval Postgraduate School.

About 80 percent of community colleges offer courses related to homeland security, according to the American Association of Community Colleges. Some, such as Northern Virginia Community College, offer certificates.



charges and government fees. More Information. © 2005 Travelzoo Inc.

Employers often hire people studying computer network security before the students have even finished the classes, said NVCC President Robert G. Templin Jr.

Four-year colleges have added courses for undergraduates in fields all but unheard of just a few years ago -- about the Taliban and cybersecurity, for example. Some offer degree programs; Virginia Commonwealth University hopes to have students studying for bachelor's degrees in homeland security this fall.

Several schools are considering establishing master's degree programs. More common are the certificates offered at such universities as Georgetown, Johns Hopkins and George Washington that allow students earning master's degrees to specialize in homeland security. Georgetown students can take a class on al Qaeda from the former head of the Bin Laden unit of the CIA.

"There is a larger, compelling calling here," said Frank Cilluffo, director of the Homeland Security Policy Institute at GWU. "This is our generation's war -- it's not going away."

This year's federal budget includes more than \$4 billion for homeland security research and development. From the Department of Homeland Security, \$64 million goes directly to university programs, including major research centers, scholarships and fellowships.

Much of the funding so far has gone to immediate practical needs rather than long-term research, some analysts said. And the rapid increases seem to be slowing, said Kei Koizumi of the American Association for the Advancement of Science. "It's no longer a blank check, where homeland security programs can get 20 percent increases each year."

Still, there is no question that there is an influx of money for homeland security studies, said Peter Stearns, provost of George Mason University, where students can earn a doctorate in biodefense.

Biodefense research is one area that is growing especially quickly: Funding from the National Institutes of Health grew thirtyfold from 2001 to 2005.

The Department of Homeland Security has created four national research centers to study food safety, threats to animal agriculture, the risk and economic analysis of terrorist events, and -- in an effort led by University of Maryland with a three-year, \$12 million grant for researchers from multiple universities -- why people become terrorists.

The agency plans three more centers, including one to study "high-consequence event preparedness and response." Michael Greenberger, the director of the U-Md. Center for Health and Homeland Security, is hoping a bid from his group of 25 universities will be chosen.

Schools also get money indirectly, through homeland security grants to state and local governments for training and education. "The entire grant program is just a staggering amount of money," said William Kelley, of Homeland Security's Office for Domestic Preparedness. And private employers are demanding people with new expertise.

As the field mushrooms, it has had its share of glitches.

Next month, Supinski's group will meet to talk about setting standards for the field. He keeps seeing an ad in the paper: "'Become a refrigerator mechanic, a paralegal and a homeland security expert!' People are jumping on this bandwagon," he said, "because students want this, and there's no quality control."

Some question the way the money is spent. Last month, the Center for Public Integrity questioned a homeland security contract for a small college in the home town of former secretary Tom Ridge. Some universities avoid federal funding for some graduate studies to ensure academic freedom.

The Center for Homeland Defense and Security at the Naval Postgraduate School in Monterey, Calif., is sponsored by the Department of Homeland Security, which pays the \$42,000, 18-month tuition and expenses, plus travel every few months to class, for such students as Lanier. "We take rising stars in homeland security," said director Paul N. Stockton-- people from the Coast Guard, the Centers for Disease Control and Prevention, the CIA, the FBI -- and teach them to design security strategies.

In class, Lanier said, she sits next to the man who was the first fire incident commander at the World Trade Center on Sept. 11, 2001.

Much of the work is done online, as students juggle the immediate demands of work at home with the need to look ahead. Sometimes Lanier has to cut class -- she was responsible for security at the Washington Nationals' home opener, when crowds choked roads and Metro stations. So she took the red-eye back to Washington, put off her thesis for another day and went to work.

She has read the 9/11 commission report, learned about budgeting, technology and civil liberties. She's studied the psychology of fear and terrorism. And she's learned about such critical links as banking, transportation, water and power supplies, down to the details of how fuel travels through pipelines and how power grids work.

Then she pinpointed where the weaknesses are in Washington.

"It's very intense," she said. She used to think just about police response. Now she thinks about prevention. Now she thinks like a terrorist.

© 2005 The Washington Post Company

Advertising Links What's this?

LendingTree.com - Official Site

Lendingtree - Find a mortgage, refinance, home equity or auto loan now. Receive up to four loan offers within minutes. When banks compete, you win. www.lendingtree.com

Refinance Rates Hit Record Lows
Get \$150,000 loan for \$720 per month. Refinance while rates are low. www.lowermybills.com

Compare Mortgage Offers
Up to four free mortgage, refinance or home equity offers - one easy form. www.nextag.com